

Customer No.: 31561
Application No: 10/709,508
Docket No.:11818-US-PA

AMENDMENT

To the Claims:

1. (Currently Amended) A method for dynamically adjusting frequency of a central processing unit, comprising:

detecting whether a translation table exists on a machine having the central processing unit;

if no:

progressively tuning maximum of a clocking range for the central processing unit of the machine; and

establishing providing a translation table[[,]] comprising a plurality of layers, according to the clocking range, wherein the translation table is defined for the front-side bus operation frequency of the central processing unit vs. a usage rate each of the layers defining a corresponding front-side bus operation frequency and a corresponding range of a central processing unit usage rate;

if yes:

obtaining a current usage rate of the central processing unit; and

comparing the current usage rate with entries in the translation table, adjusting the front-side bus operation frequency to a corresponding layer, so as to locate the current usage rate in the corresponding range of the central processing unit usage rate.

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2. (Cancelled)

3. (Original) The method for dynamically adjusting central processing unit frequency as recited in claim 2, wherein a frequency down-conversion is performed in the translation table when battery power is supplied, and a frequency up-conversions is performed in the translation table when external power is supplied.

4. (Original) The method for dynamically adjusting central processing unit frequency as recited in claim 1, wherein an interval between the layers is one million hertz.

5. (Original) The method for dynamically adjusting central processing unit frequency as recited in claim 1, wherein the obtaining the current usage rate is performed by measuring with software.

6. (Original) The method for dynamically adjusting central processing unit frequency as recited in claim 1, wherein the obtaining the current usage rate is performed by measuring with operation system.

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7. (Previously Presented) The method for dynamically adjusting central processing unit frequency as recited in claim 1, wherein when comparing the current usage rate and the translation table, the layer is raised to an upper layer if the current usage rate is higher than the current layer, so as to up-convert the front-side bus operation frequency.

8. (Previously Presented) The method for dynamically adjusting central processing unit frequency as recited in claim 1, wherein when comparing the current usage rate and the translation table, the layer is dropped to an lower layer if the current usage rate is lower than the current layer, so as to down-convert the front-side bus operation frequency.